Coping with the Pandemic

National Flu Vaccine Summit

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May 18, 2010
Flu Pandemics

• Irregular, ~2-3 per century

Trends in Infectious Disease Mortality in the United States During the 20th Century

### 20th Century Influenza Pandemics

- **1968-69 “Hong Kong flu,” (H3N2)**
  - 34,000 US deaths (1-4 million worldwide)

- **1957-58 “Asian flu,” (H2N2)**
  - 70,000 US deaths (1-4 million worldwide)

- **1918-19 “Spanish flu,” (H1N1)**
  - >600,000 US deaths (20-100 M worldwide)
  - 2.5% overall mortality
  - Most deaths among young, healthy adults

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**Three pandemic waves: weekly combined flu and pneumonia mortality, U K, 1918–1919**
Canadian lab confirms human swine flu cases in Mexico

World health agency schedules emergency meeting after 20 deaths

Last Updated: Friday, April 24, 2009 | 10:17 PM ET  Comments 380  Recommend 411

1918 Death Rates: Philadelphia v St. Louis

Moving crazy fast

• Fri, 4/24 – Cases confirmed in Mexico
• Sat, 4/25 – 1st CDC conf call
• Wed, 4/29 – 1st (of 4) press conferences, 1st confirmed case that closed 1st school
• Fri, 5/1 – Lots of pending labs, all over valley, involving dozens of schools
• Fri night, 5/1 – Decision re: school opening
• Sat, 5/2 – School Superintendent Conf call, announcement of schools reopening

How do I put this in a sound bite?
Timing is Everything

- CDC School closure policy revision – (5/6) 4 days later
- School policies for 2nd wave in place before late July
- Mass media, school, health care, cities, tribes, churches, and employer education campaigns running by summer

Outreach

- Presentations (50 by me)
- Media (separately Spanish media)
- Focus groups with parents (and surveys)
- Website, handouts, posters, PSAs
- Daily updates, twitter, lots of interviews
- Sample letters (for schools)
- Newsletter articles, email updates…
Stop the Spread is a campaign to educate the public about the Novel H1N1 Flu pandemic, how it differs from seasonal flu, and how these two flu viruses can impact you, your family, and your community.

Please select a county or state website above and read more about how this campaign was created to help you consider what you’ll need to do to get ready for this flu season. Stay well and thanks for helping us Stop the Spread!

NOVEL H1N1 Flu 2009

This site was created to help address some of our questions, concerns or help you access other sources of information. Check back often as we will update it as we learn more information and also please check out our index page and read from Dr. Bob and Dr. Rebecca talk in further detail about this flu season.

The icons on the left will take you to pages that provide detailed information and resources to help you educate yourself and your family regarding Novel H1N1.
La Gripe y su Familia

1. Enseñé a sus hijos buenos hábitos de higiene - ¡todos los días!
   Debes dcharte con el cartón o con una toalla desechable al toser o estornudar.
   Usa buenos hábitos para lavarse las manos y desinfectar todos los objetos.

2. Deje a los niños en casa cuando están enfermos.
   Cuando un niño va a la escuela enfermo puede infectar a otros compañeros de clase y pueden
   ser esenciales contagiados en el ambiente.
   Los niños enfermos deben quedarse en casa.

3. Considere ponerse la vacuna durante la temporada de Gripe.
   La vacuna funciona mejor para defender la propagación de la gripe cuando todo el
   mundo se vacuna y se que los gérmenes no tienen un lugar a donde ir.

THE GATTLING SYRINGE

- Dr. Bob
ACIP Vaccine Guidelines

- Everyone 6 mo - 24 yrs
- 25 - 64 yrs with risk factors
- Caregivers of infants < 6 mo
- Pregnant women
- HCWs & Emergency medical workers
ACIP Vaccine Guidelines
During a Shortage

- Children 6 mo - 4 yrs
- Children 5 yrs - 18 yrs with risk factors
- Caregivers of infants < 6 mo
- Pregnant women
- HCWs & Emergency medical workers

Are we missing the big picture?
Mass Vaccination of Children in Japan Reduced Overall Deaths

Role of School Health

- Push hygiene messages
  - Teach kids
  - Info to parents
  - Teach the teachers
- Vigilance & Enforcement
  - NO sick kids in school
  - Call Local Health Dept for dramatic changes
- Mass vaccine effort

The Search for Immunizers

- RFP during the summer
  - Bill insurance first
  - Turn no one away
  - We’ll reimburse ≤ $8 admin fee for uninsured
- Handful of immunizers signed up
  - But only one willing to do schools
- School-based vaccines:
  - Mesa schools done by Mesa Fire Dept
  - Scottsdale schools by Scottsdale Health Care
  - All others solicited by ONE private mass immunizer
  - We urged all schools to participate
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**What happened with vaccine?**

- Fluctuating daily vaccine allocation
  - (~1/3 of projections through Oct)
- Much more LAIV than providers preferred
- Early MCDPH principles:
  - Push it toward highest risk groups
  - Keep it moving (nothing in the 'fridge)
What happened with vaccine?

• Fluctuating daily vaccine allocation
  – (~1/3 of projections through Oct)
• Much more LAIV than providers preferred
• Early MCDPH principles:
  – Push it toward highest risk groups
  – Keep it moving (nothing in the ’fridge)
• Later: divert to schools (herd effect)
• Then: *pleeeeeze* take it, anyone, everyone
Schools Served by Mass Immunizer

752 Public + 258 Charter Schools = 1,010 Total

- 69% served
- Vaccinated for H1N1: 45%
- Did not vaccinate for H1N1: 34%
- Did not vaccinate for H1N1 - Objectors: 21%

Parents Survey
600 Households
Mean % of Students Vaccinated at each School by Mass Immunizer

34% Immunized at School

Where Students were Vaccinated

43% Immunized at School
Parental Satisfaction with School Immunization

88% Very or Somewhat Satisfied

Not Satisfied
Satisfied

ASU (began after 11/10)

Doses vs. Students

68K total
8,100 doses

(10,500 doses provided, 2,400 returned, but some used in Nursing-run clinics?)
Bob’s nightmare

• Public memory afterward:
  – “They made a big deal of flu shots, and everyone got sick anyway”
  – “I got my flu shot and I got sick”
  – “Flu shots don’t work / don’t matter”

• Much evaluation ongoing

Optimistic Notes

• In a HUGE community, with very little time:
  – Vast majority of schools participated
  – Nearly half of kids vaccinated
  – Only 21% cited objections (often due to perception of vaccine as “new” or “experimental”)
  – Complicated billing may have led to some passive missed vaccinations

• With planning and simpler system, school based flu vaccination may reach herd effect
“It’s just the flu”

Influenza Estimates for the US

- Cases: 25 – 50+ million cases
- Infection rate: 7% to 20% of general pop
- (among kids 5-14 y.o.) 16% to 38%
- Days of illness: 100 – 200 million days
- Work loss: ~75 million days
- Hospitalizations: ~114,000
- Deaths (avg in 1990s): ~36,000
- Costs: ~$3-5 billion

MMWR 2003; 52 (RR-8); Thompson et al. JAMA 2003; 289: 179;

StopTheSpreadAZ.org

( WeArePublicHealth.org )

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